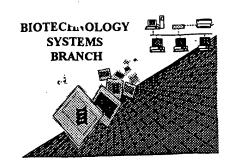
Sharehen

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/509,7/2

Source: 1/48 Rus # 7/23/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/509,7/2
TTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWAR
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in Patentln version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, Patentln would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence <210> sequence id number <400> sequence id number 000
Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220> <223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
0Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown o is Artificial Sequence
IUsc of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
2PatcntIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

AMC - Biotechnology Systems Branch - 06/04/2001

1648

DATE: 07/23/2001

PATENT APPLICATION: US/09/509,712 TIME: 15:47:30 Input Set : A:\W103960.txt Output Set: N:\CRF3\07232001\I509712.raw Does Not Comply Corrected Diskette Needed 2 <110> APPLICANT: Rubin, Donald H. Organ, Edward L. DuBois, Raymond N. 6 <120> TITLE OF INVENTION: Mammalian Genes Involved in Viral Infection and Tumor Suppression 9 <130> FILE REFERENCE: 01123.0004/P 11/ <140> CURRENT APPLICATION NUMBER: US/09/509,712 11 <141> CURRENT FILING DATE: 2000-02-11 I her even type exists in all sequences (global even) 11 <150> PRIOR APPLICATION NUMBER: 60/062,021 12 <151> PRIOR FILING DATE: 1997-10-10 14 <160> NUMBER OF SEQ ID NOS: 127 16 <170> SOFTWARE: FastSEQ for Windows Version 3.0 ERRORED SEQUENCES 18 <210> SEQ ID NO: 1 19 <211> LENGTH: 925 20 <212> TYPE: DNA sel viem 9 on Ever Jumay. 21 <213> ORGANISM: Rattus norvegicus W--> 22 <400> SEQUENCE: 1 E--> 23 gggggaaaac chyghaattg ttttttgacg ahccaaaaag ggghchagha gchhtthtcc 60 tanatggggn cgggatcntn tccnaggana gattnatgga gtatnccttt tttgcncnaa 120 E--> 24 180 // E--> 25 ggttgattgc tcttgaaagg ntttgaggtg naattcctcc gtnagtttga ccgtagtcgg E--> 26 atntgaagag ggattgttna gcagncataa tttcattccc tgnacaccca gtaacnnttt 240 300 E--> 27 acceptcattt ggttgggaat tgatntcggg aggtancaan ggccacagtt atttattgtt E--> 28 360 neggaggatt geaceaattn ggeeggetge etetganate tgttteteat eeatgeeggt E--> 29 tcacccagac gaaagccgaa agenteggga gtectaactn tagteentga aagteattee 420 480 30 caqctqcqta attqqqctqt gcaqaqtccc agctcggtaa atatttgccc cgtgactgag 31 ctggagagaa tgctcctttc ttggtcctgg gcagctcttg gcagctcaca tgcactgttt 540 600 32 acctatecte ceaeatteee eeetgaggaa teategtgee teggtteeet taagteetet 660 33 caacagaaaa caaggcagag tggaacgaag gaaagtgcgt ggccgttaga aagcctgtct 34 cgaatctgtc ccacgtgcct caggtagcgt tccaaacagc aaagattcta gtgaagaaaa 720 780 35 ataccgtccg gtcaattagt caggtggaca gagcaggacc cggtgtcttg gaagcctcgt 36 ccattcctct ggggaaggtg gggggggcg tgtaatgcag ctctcaagaa gaaggtattt 840 900 ttgttttcct ggagaaactg ccatcccagg agctgagagt ggatcagtag gaaggcctgt 925 Jun 9 E--> 38 (gacaggaagc agggaggttc ageng 40 <210> SEQ ID NO: 2 41 <211> LENGTH: 554 42 <212> TYPE: DNA 43 <213> ORGANISM: Rattus norvegicus W--> 44 <400> SEQUENCE: 2 60 E--> 45 caagatngan ggggcggcgg ttcgnccaga gagcgggtag ggaagggaac gcgccggatg 120 E--> 46 agccngggtg cgganagcca gaccccaggc gtgggaaggg gagagagata gagcggccgg 180 E--> 47 ttgggaagag gaggaccgtg gttnataaat aacagaaagc ccagagggac gtanccatcc 240 E--> 48 qqqatqqaqa qaqqtaggga atccagntgt aagtcccaaa ctgccaccac cttcatnaga

actgettegt gtaaggteac geacegggee agetgteeng agtggeggte etggegtgtt

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/509,712 TIME: 15:47:30

DATE: 07/23/2001 TIME: 15:47:30

Input Set : A:\W103960.txt

Output Set: N:\CRF3\07232001\I509712.raw

E> E>	51		aagtnactgc ccctcctatt ctgtaactga	aaacttttca	cttcctttca	cttagtttcc	tnacttcttt	360 420 480	dem 9
E>	53	aaagtaatcg	tgttttttat	gcctgtcaac	tecettttea	tntaaagcag	ggcntaccct		
	54		-					554	
		<210> SEQ II							
		<211> LENGTH							
		<212> TYPE:							
		<213> ORGANI		norvegicus					
		<400> SEQUEN	tttccgtnaa	aatanan aat	200000000	aaaaatanat	taataaaaaa	60	
E>			geggateetg					120	•
E>			ggggagggac					180	Ling
E>			tcacattntg					240	Non
E>			atgtgtgctt					300	
E>	-		gccctntttt					360	
E>		_	nntcacctag	-	-			420	
E>			tcagcttatt					480	
E>			catcttcaaa					540	
E>			gcgcgaccag					600	
E>			ggttctcaga					660	
E>	71		gtaatattnt					720	
E>	72						cngatatete	780	
E>	73	catctctgtg	acttccagac	cggcntcgcc	agagcaagtt	ccaggccacc	cagatgagat	840	
E>	74	gctcacagag	gggacctttt	tntgatgacc	aacgnagnat	gcaagtaagg	a	891	
	75 -	<210> SEQ II	NO: 4						
	76 -	<211> LENGTH	1: 974						
		<212> TYPE:		•			,		
		<213> ORGANI		norvegicus				·	
		<400> SEQUEN							
E>			attccgnntc					60	
E>							cnaagncccn	120	•
E>			nenttteece					180	21. G
E>			gttnttgccc					240 300	aun
E>			gttncnantt					360	
E>			ccttattgac				atnccnngna	420	
E>			gngcagggcc					480	•
E>			gaagtancca					540	
E>		aggettttag	aactgcagag	acttcaaaat	cttgggaage	ggagggagnn	aaagattgga	600	
E>		atacactata	cttttgcaat	atagagttta	cetacetact	ggetentete	ctactntntc	660	
E>			tgaggctact					720	
E>		tccgagcaga	aagggacaga	cqtqqqqcaa	tgaagttgct	atcgtttntt	tttttttctg	780	
	93		aaagtgtgca					840	
	94		ccgaggacgc					. 900	
E>			ggaccttntt					960	
E>		acgnnnctcc				-		974	
	97 -	<210> SEQ I						•	
	98	<211> LENGTH	H: 850						

PATENT APPLICATION: US/09/509,712

DATE: 07/23/2001 TIME: 15:47:30

Input Set : A:\W103960.txt

Output Set: N:\CRF3\07232001\I509712.raw

	99 <	<212> TYPE: DNA							
	100	<213> ORGANISM: Rattus norvegicus							
W>	101	<400> SEQUENCE: 5							
E>	102	anttttccct caagnaaant	ntggtttggg	caacttgaag	acgcttnnac	cnaaaaccct	60		
E>	103	tgnggagntt ggngaccttn	ttaccgnaan	gagtgggaaa	cgttttcctc	cgggttnang	120		
E>	104	gttaggggga cccgnnggaa	aattttaaaa	ccnngngggc	tttttcgaat	taaggggaaa	180		
E>	105	ngcggtttng gtnnntgaag	ggcgggnggt	tggagtcnna	gtccagagtt	gatttccacc	240		
E>	106	cacaaatntg ggaggtgncg	gggaatgntg	ncnttttctt	gngatgaggg	ntgccgtncc	300	_	
E>	107	ggantaacag ngnttgcntt	gtntngcnaa	acgaagagtn	tcctgnttgg	aataggngtt	360	. 9	
E>	108	cngttcgang ganccagatt	tangngntgg	agnaaggatt	nggcagataa	angcntgaga	420	Lemg	
E>	109	natgnancnt ggancaggtc	nggncnnagn	ntacagatga	tgnncccana	canganataa	480	\mathcal{N}^{-}	
E>	110	ntncagatca cagtcgtacc	cgnggctggg	ccatgaanag	ggcatcccca	gacnnacaca	540	•	
E>	111	ngccttnana antgntcaga	gaaccancag	tggntanggg	ntgcccnnnn	naccagggaa	600		
E>	112	gacccggggc gtgncggata	ttgacacanc	agatnncatt	tggggncggt	tcgagggttn	660		
E>	113	atgntcnccg agtacnagan	angatentee	aacccggaat	neggtgetee	ngtegteega	720		
E>	114	tgnaatgagt cgnccggnaa	cctcatatcc	aagaaacnat	acagcagtgg	nntccgagtc	780		
E>	115	tcgtatantc nttgcgggng	gaggctatnt	tcagaggnca	agattaccgt	tagcgggana	840		
E>	116	aagtngaana					850		
	117	<210> SEQ ID NO: 6							
	118	<211> LENGTH: 531						•	
	119	<212> TYPE: DNA							
	120	<213> ORGANISM: Rattus	norvegicus						
M>	121	<400> SEQUENCE: 6							
E>	122	ttgnggengg gteteetetg					60		
E>	123	ngtctnntgt ctgtgtngtg	cccctgtccn	catctctcac	nccagggaga	gagatgtgag	120		
E>	124	5 5					180	- 9	
E>	125						240	Jen 9	
E>	126	J J J J J					. 300	\sim	
E>	127						360		
E>	128						420		
E>	129	3 32222					480		
E>		23 3	nnnttggggc	ccccaggng	tttttcnccc	C	531		
		<210> SEQ ID NO: 7							
		<211> LENGTH: 572							
		<212> TYPE: DNA							
		<213> ORGANISM: Rattus	norvegicus						
		<400> SEQUENCE: 7				A A			
		tttttntgtg gccctttaaa					60		
		gagacancgg nnacacagag					120	-	
E>		aaccnegggg netentgttt					180	G	
E>			ntggggtttc	ccntgaggag	anatagagtt	tcacactctt	240	James	
E>		ctctccgagg ggtcntcnca					300	β^{ω}	
E>		agggggtgng ctctctctgc	ncagggcncc	ccccaanang	tagaganaca	ntgtggtgtt	360	ı	
E>		tcacaacaca attcncgaga					420		
E>			atnttcnccc	ccctttcaca	ctgccccnag	agagagaaan	480 540		
		tctnggcccc ctctanannt			cacaggtntt	cccagggtat	540 572		
E>			aaagatntgc	nc			572		
		<210> SEQ ID NO: 8							

147 <211> LENGTH: 906

PATENT APPLICATION: US/09/509,712

DATE: 07/23/2001 TIME: 15:47:30

Input Set : A:\W103960.txt

Output Set: N:\CRF3\07232001\I509712.raw

	148	<212> TYPE: DNA			•	·		
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W>	150	<400> SEQUENCE: 8						
E>	151	tgggagtete teteatatgg	cgcnttcncc	aaaggggngt	ctctntccng	agncgcanac	60	
E>	152	gcgagaanac tctgtnnant	ngteteece	cncnccnaca	gngtganant	caaaacctct	120	
E>	153	agagecece agaaaneece	tntctcaaan	aaagagaaag	agaagancga	gnagnagaga	180	
E>	154	gananagaga gagagagtgt	gganctntnt	cctcngancc	ccannnanan	ngtgnggcnc	240	
E>	155	actenenngt gnngngnace	ccnggggatt	tnegegtgte	cccttgngct	ctgtntanga	300	
E>	156	gananatatg tntagtctct	ctntcgcccc	ctccgntgtc	acgtgtgcgg	ggcccnngag	360	• •
E>	157	acacagacac ntctctcang	gggaacacat	anngactene	acntgtgttt	atattcnccc	420	9
E>	158	ctcccnctca cacanacaca	cacacagnag	atattnngct	actctctctc	tgtcacaggg	480	Jew?
E>	159	gtacanattt antctnggcc	anacccctct	cngaagngng	ggcanngtaa	accccgcccc	540	\mathcal{D}^{-}
E>	160	ctctcngaga angngagggc	gntttacntt	cccngtggcg	tgtncgngcc	cccgagactc	600	•
E>	161	cccttngnac ccccctntna	accctctntt	tgaacncaac	ncaccntccc	cnttttctcg	660	
E>	162	gggnnggnee ngeneeenet	ctcncaaaaa	aaattnnaan	ttngtcccct	nccccnttnt	720	
E>	163	ttenggnana aaccgtgtee	gggggggan	nactctttt	tgnccttaaa	atcaantttt	780	
E>	164	ttcccctttt ccnggggacc	cccgnnttcc	tttttaaaaa	aaaanaaccc	tttctccctt	840	
E>							900	
E>	166						906	
	167	<210> SEQ ID NO: 9						
	168	<211> LENGTH: 914						
	169	<212> TYPE: DNA						
	170	<213> ORGANISM: Rattus	norvegicus					
W>	171	<400> SEQUENCE: 9			·			
E>	172	gggatgngcc ctcagatcaa	tacacccctc	ngggggngtc	tctctctatc	tcccncagna	60	
E>	173	gacteccate tetntntntn					120	
E>	174	ttctcnantc tctaaaagng	cnaaaagcgc	ananacacgn	gcctctctat	anatctcacg	180	
E>	175	tgteeenngn netetengae	ccctnntctg	tntgagagac	accctntctc	aaaatatagt	⁻ 240	
E>	176	gtacacgngc tttgnggctc	tccccttttc	tctccactnt	tgagngngaa	acgcggngtt	300	-
E>	177	ntctctgaga tgtaganagn	gtcccctnct	cnatatatgt	gttncccact	ccnnagggng	360	9
E>	178	tctcataaaa atcncntntc	tcaacaccac	cncctcnacc	ccccncacga	gaacacntcn	420	10m
E>	179	ccaccncnan gacacaaana	naaggngtnn	anaaccccan	aaaaactnng	ntntcngntt	480	J
E>	180	tacacacaca cacacncacn					540	ι
E>	181	ggngtgggtg ttngnntcaa	caccntntta	cctctctgnt	gnnanttgag	aaaatatttc	600	
E>	182						660	
E>	183						720	
E>	184						780	
E>	185	cctgggtttt tttccccctt					840	
E>	186	ggaaaangcc tttnnctgnn	nntttttcc	cttccccttt	tnnangggnt	tecececee	900	
E>	187	ccngaatttt tttt					914	
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		<213> ORGANISM: Rattus	norvegicus					
		<400> SEQUENCE: 11						<u>~</u>
		acccaatctt nanggtggca					60	4
		tegetencae ecceaageet					120	seng
E>	207	cgaaatttta aaaaccgtcg	ttagaggaaa	tgaaggttca	gccgaccatt	acctganagt	180	F
E>	208	aatgaaggtn ttccggaggg	ttgccttcca	atcccagatg	gatttgagtt	tcaggatcaa	240	•

DATE: 07/23/2001 PATENT APPLICATION: US/09/509,712 TIME: 15:47:30

Input Set : A:\W103960.txt

Output Set: N:\CRF3\07232001\I509712.raw

E>	200	ttaaattaaa a	mtasaasta	asaannaata	anatataata	attacatcac	~~+~~+	-300	
E>		ttcagttacc g gagtgagtga t						360	
E>		tgtctcagtc c						420	~ ,
E>								480	9
	213	tccaccacag g						540	اسمهوا
	214	ggagaaaatt c						600	100
E>								660	<i>(</i>)
	216	gtaagcttga t						720	
	217	ccatctctct c						780	
E>		agcagagatg a						840	•
		gcgaaagncc c				ccgagagcca	cgagccaggn	880	
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		<211> LENGTH:							
		<212> TYPE: D							
		<213> ORGANIS		norvegicus				·	
W>		<400> SEQUENC							
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E>	226	nngngagnaa c						120	
E>	227	nagacggtgc n						180	
E>	228	agcnnaaanc g						240	
E>	229	gngagcggna g						300	~
E>	230	gagnnncgcc a						360	9
E>	231	gagggncgan g	acggnnngn	annggnnaga	ggcannnnnc	gccnanagng	ngaagngagg	420	Jemy
E>	232	cangagtgnc g	cnngagnag	acaggcccgc	gcnccggggg	cagacnnngg	ncaccaccga	480	20.
E>	233	gggtgggngg g	gcncggaga	naagaccaga	ggnnngaggg	cganggcnng	ggtnngcccg	540	1
E>	234	ggccncccna a	aaaaanncc	gaaaaaaaan	aaggggcgcn	gengggengg	ggaggagcgc	600	
E>	235	ntnncgtang t	ngantgacg	gaggccngna	atngggccgn	gccanncnag	ggcgnagagg	660	
E>	236	cccaagngcg g	maggngnaa	gnanagancc	ngnnggtngg	gagnganagn	gcnnggnncc	720	
E>	237	nacccccngn g	ttganggen	cccacgncgg	ngcaggccgn	nnaaagngag	tccccnaaaa	780	
E>	238	nntcgnggtn t	nacancgnc	ccggggncgc	cgcngngtcc	cgncacacng	gannncggag	840	
E>		anngcctnnt n	tctncacan	ggngccanac	nngntgctat	gcaaaagggg	cgnacttcna	900	
E>		gaaaaagnc						909	
		<210> SEQ ID							
		<211> LENGTH:							
		<212> TYPE: D							
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		<400> SEQUENC							
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E>		ncccnggggg g tttnaaaaag g						180	
E>								240	~
E>		tcgacgggtt t tngcaaattg c						300	Jeng
E>		gngtggaaaa a						360	Der
E>		nggngccagg a						420	<i></i>
E>		tatttggcag c		_				480	•
E>		ggccagggta a			_		_	540	
E>		aanacaagna a						600	
E>		tggtgaacgt t						660	
E>		gaatcagtgn t						720	
		J	- 5 - 5	2225	-	5 3	-		

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.